

Digestive Diseases

By R.D. Scoggins

Digestive diseases are a frequent problem of horses, and insurance companies cite colic as the most frequent cause of death in horses insured against loss. The following is a discussion of some of the more frequently seen causes of digestive disturbance.

Problems in the mouth—the beginning of the digestive tract—can result in improper chewing of food which can then hamper swallowing and digestion.

Malformed mouth parts on newborn foals should always be evaluated. Some abnormalities may be repaired surgically, while others may be impossible to successfully repair. Because many of these conditions are considered her-

itable, use of these animals as breeding stock should be discouraged.

Wry muzzle, cleft palate, overshot or undershot jaws are all conditions affecting horses. Their importance in animals depends on their severity. These problems not only affect eating, but can seriously interfere with a horse properly wearing bits for control when it becomes old enough to train for riding or driving.

Since dental disease may occur at any age, horses should have their mouths examined twice yearly for dental abnormalities. Although caries or cavities are uncommon, abnormal or uneven wear is frequently observed and needs correction.

Young horses lose their baby teeth from 2 to 5 years of age. At times, these are not shed normally, and it becomes necessary to assist in their removal. When sharp points de-

R.D. Scoggins is Equine Extension Veterinarian, College of Veterinary Medicine, University of Illinois, Urbana-Champaign.

velop along edges of the grinding or jaw teeth, they irritate the inside of the lips and edges of the tongue. These sharp points are filed down with specially designed files called "floats."

Horse owners can recognize possible dental problems when horses begin chewing abnormally, twist their heads sideways, drop excessive feed from their mouth, or refuse to eat hard grains or pellets.

Foreign bodies in the mouth cause similar problems. Grass awns, pieces of wood or metal, corncoobs, and other items may lodge in the mouth and interfere with eating.

Prevention of foreign bodies is best accomplished by care in feeding practices. Use only clean feed boxes and avoid hay with foxtail or similar type awns in it.

Throat Problems

Choke is a condition in horses that occurs when feed becomes lodged in the esophagus. While choke seldom is life threatening, it is uncomfortable to the horse. Many horses become excited and lunge about trying to dislodge the material causing the choke. In the process, they may injure the handler or themselves.

Choke usually occurs when horses attempt to eat

too fast, or are fed very finely ground or very dry feed. Grass clippings from lawns also can cause choke.

Horses with choke should be placed in a stall and allowed free movement of their head. Veterinarians usually attempt to remove the choke with a naso-gastric tube and lavage or flushing with water. Sedation may be necessary to accomplish this.

Owners should not attempt to dislodge a choke themselves as injury to the esophagus or lungs may occur.

Since horses that choke are prone to do it repeatedly, such horses should be denied access to the type of feed or circumstances that may cause choking to occur.

Use of large flat bottomed feed troughs or the placing of large rocks (softball size) in the grain box will slow down gluttonous eaters. Do not feed extremely dry or finely ground grain. Allow adequate eating space when horses are fed in groups. These procedures should reduce the possibility of choking.

Colic Calls for Action

Colic is a broad term that describes a horse showing abdominal pain. This can be caused by a number of conditions but common usage indi-

cates it is pain in the digestive tract.

When colic occurs, it is important to determine the exact cause if possible. Successful treatment often depends on a correct diagnosis.

A distended stomach, acute inflammation of the small intestine, parasites that cause a decrease in blood flow to the intestine, dry food impaction, or gas distention of the large bowel are all types of colic that can occur and will vary in degree of severity as well as treatment required.

Any colic, no matter how mild, is an emergency. The potential for the condition to worsen is too great to risk delay in treatment.

Owners first notice horses that have colic when they stop eating and drinking. The horse may curl its upper lip, paw at the ground and turn its head toward either side. More severe pain causes colicky horses to sweat, to get up and down, and to attempt to roll. The horse with colic indicates it is in severe discomfort.

Rapid breathing, profuse sweating, violent activity and a cold clammy feeling may indicate the horse has gone into shock and is in need of immediate professional attention.

Veterinarians attempt to diagnose the specific type and

cause of colic. They use medication to control pain and the horse's response helps evaluate the severity of the condition. Reducing the pressure in the stomach is important and oral medication may be needed to lubricate the mass or prevent further gas distention.

Medication given orally by owners may be dangerous since it can accidentally enter the lungs and cause pneumonia.

In some cases, surgery is the treatment of choice. This means moving a very hurting, sick horse to a veterinary hospital that has surgical facilities. The decision needs to be made as soon as possible and necessary supportive treatment must be provided until the horse arrives at the surgical hospital.

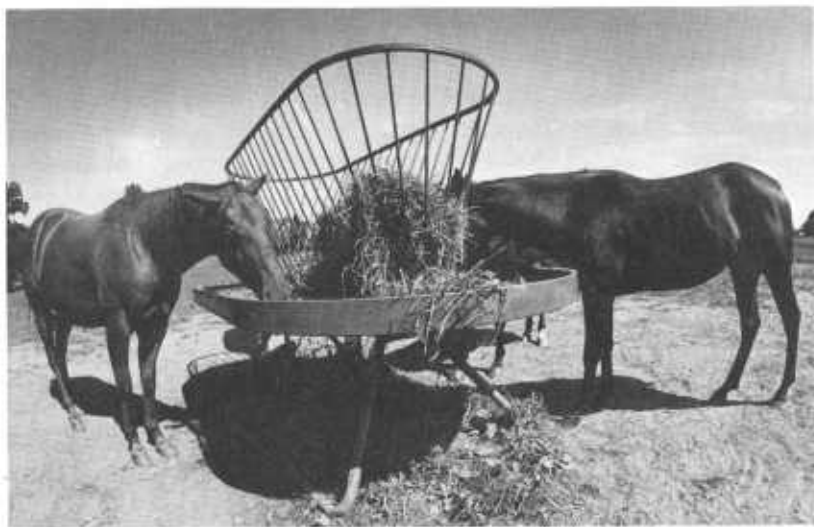
The most frequent causes of colic are internal parasites and sudden drastic changes in the feeding schedule, either in the amount or kind of feed. Nearly 90 percent of the horses that die from colic have related lesions due to internal parasites at autopsy. Diarrhea, especially in young horses, can result in colic due to telescoping of the bowel.

Any severe digestive up-



Marie T. Sebrechts

Regular check-ups are as important to horses as they are to you. Although horses rarely get cavities like people, abnormal or uneven wear is frequently observed and needs correction. So their mouths should be checked twice a year.



Marie T. Sebrechts

Allowing adequate eating space when horses are fed in groups helps reduce the possibility of choking.

set has the potential to result in colic symptoms.

Prevention is best accomplished by:

- 1) An ongoing parasite control program, especially for young animals

- 2) Maintaining a regular feeding schedule using only quality feeds

- 3) Avoiding sudden dietary changes in kinds or amounts of feeds

- 4) Providing salt and clean fresh water free choice at all times

Treatment of this emergency condition is best left to professional veterinary care.

Potomac Fever

Acute Infectious Diarrhea Syndrome or Potomac fever is a severe diarrhea condition of horses. Most affected animals are adults that may have recently been under stress. About 30 percent of horses with Potomac fever die, so both owners and veterinarians are quite concerned.

Researchers at several veterinary colleges are attempting to identify the causative agent. At the present time, a virus transmitted by a biting insect is the primary suspect.

The majority of cases have occurred in Maryland,

Virginia and southeastern Pennsylvania. Similar cases have been reported from other areas of the country, but until a specific agent can be identified, it is difficult to verify that they are all caused by the same organism.

Infected horses become depressed, stop eating and develop a profuse watery diarrhea. Some horses will have a fever of up to 105° F before the diarrhea starts. With continued diarrhea, the affected horses become weaker and develop signs of shock. The disease does not seem to be contagious and does not affect humans.

Treatment must begin as soon as possible and is intended to replace fluids and control the diarrhea. Large volumes of intravenous fluids and antidiarrheals are necessary. Time required for almost constant treatment becomes extensive and therefore fairly expensive.

At present, no vaccine is available. Horses should be handled in a manner that minimizes stress. Insect control, particularly ticks, is important.

Further research hopefully will provide more adequate answers concerning prevention and control of this disease.

Other Diarrheas

Other causes of acute diarrheal disease in horses include colitis X, salmonellosis and other diarrheal syndromes. Most of these are related to or follow stress, such as hauling, respiratory disease, or surgery. In some instances, such as salmonellosis, the diarrhea is contagious between horses and may infect humans.

Most of these diarrheas respond to vigorous treatment, although laminitis or founder frequently occur following a severe diarrheal episode.

Specific treatments or preventions are not available at this time. Salmonellosis can be vaccinated against with an autogenous bacterin. On occasion a horse will recover and be left with chronically soft stools.

Foal Heat Diarrhea

Most newborn foals develop diarrhea at 7 to 12 days of age. At about the same time the mare comes into what is called foal heat.

Affected foals usually show no problems due to the diarrhea, but occasionally the foal becomes ill or the diarrhea persists. Some may even develop serious intestinal problems and colic.

The cause is felt to be related to larvae of the intestinal threadworm, *Strongy-*

loides westeri. The immature larvae locate in the mare's udder and the foal acquires an infection by nursing. Within 8 to 10 days the parasites are established within the foal's intestinal tract. They irritate the gut wall, which results in the foal diarrhea.

Prevention is best accomplished by deworming pregnant mares during the last 30 days of pregnancy with drugs effective against the *S. westeri* larvae.

Affected foals may respond to intestinal protectants, appropriate deworming agents, and—if needed—fluids. Oral antibiotics seldom are of much value.

A secondary problem is the scalding of the foal's rear quarters, with resultant burning and irritation and hair loss. To prevent this, horse owners must clean the foal's rear parts and place some protective ointment on the area. Vaseline or zinc oxide ointment on the foal's tail helps, as it becomes a self-made applicator.

Seemingly harmless diarrheal conditions can rapidly become critical. Horse owners need to keep a close watch on any animals with diarrhea. Proper treatment and after-care are essential to minimize resultant problems.